The international platform of Ludwig-Maximilians University's Center for Economic Studies and the Ifo Institute

CESifo Working Papers

www.cesifo.org/wp

# Determinants of Financial Inclusion of Urban Poor in India: An Empirical Analysis

Dhananjay Bapat
Biswa Nath Bhattacharyay

CESifo Working Paper No. 6096
Category 13: Behavioural Economics
September 2016

*An electronic version of the paper may be downloaded*
*• from the SSRN website: www.SSRN.com*
*• from the RePEc website: www.RePEc.org*
*• from the CESifo website: www.CESifo-group.org/wp*

***ISSN 2364-1428***

CESifo
Center for Economic Studies & Ifo Institute

CESifo *Working Paper No. 6096*

# Determinants of Financial Inclusion of Urban Poor in India: An Empirical Analysis


## Abstract

Financial inclusion is crucial for the inclusive and sustainable economic growth of developing countries. Access to financial services to all citizens, particularly to low income and poor people is a key to promote inclusive growth. While rural financial inclusion assumes importance from policy makers and academicians, urban financial inclusion needs urgent attention with rapidly increasing urbanization, unique requirements of urban population and increasing poor and low income population living in urban areas, particularly slum areas. The paper attempts to analyze the nature, characteristics and determinants of financial inclusion in Pune, a large city of India based on a household survey at an identified slum area. Empirical findings of the survey include the socio-economic characteristics and banking behaviour of households Furthermore, the paper identifies the major determinants of the level of financial inclusion using a multiple regression model using socio-economic characteristics of the households. Finally the paper suggests appropriate policies and strategies for enhancing financial inclusion in urban areas through building low cost personalized distribution network, creating asset linked and collateral free credit schemes, leveraging Aadhar (biometric identity card) platform, creating targeted product and service offering, strengthening business correspondent cells, and setting up urban financial inclusion centers.


JEL-Codes: D010, D040, D140, G210, R200, C810.

Keywords: financial inclusion, urban poor, India, household survey and statistical analysis.

*Dhananjay Bapat*
*National Institute of Bank Management*
*Pune / India*
*dhananjay1304@gmail.com*

*Biswa Nath Bhattacharyay*
*Asian Development Bank*
*Manila / Philippines*
*dr_biswa@yahoo.com*

## 1. Introduction

It is well accepted fact that financial development and economic growth go hand in hand. Financial inclusion of citizens is crucial for inclusive and sustainable growth of developing countries. Access to financial services to all citizens, particularly to low income and poor people is a key instrument to promote inclusive growth.  Financial inclusion can be defined as “the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low-income groups at an affordable cost”.  A report the Committee on Financial Inclusion (2008) noted that there are no clear estimates of number of people in urban areas with any access to organized financial services. The report stated that only 59 per cent adult population in the country has bank accounts. In terms of rural–urban coverage, 39 per cent bank accounts are in rural areas, while 60 per cent in urban areas. One more way to assess is the number of adult population having loan accounts. In rural areas, the coverage is 9.5 per cent and in urban areas, the coverage is 14 per cent. It indicates that large section urban adult population is unbanked (Report of the Committee on Financial Inclusion, 2008). A study by World Bank (2014) shows that about 2.5 billion are remaining away from formal financial system, leading to financial exclusion. Nearly 50 per cent of adults are unbanked in the world. The situation is even worse in the developing world with 64 percent of adults unbanked. Nevertheless, high income countries also have to worry because approximately one in every five adults is unbanked. Hence there is wider acceptance to consider the financial exclusion as a one of the major barrier to growth and development.

Most studies in literature discussed the financial inclusion of poor rural households. There is a need to study the issue of the financial inclusion of urban poor in order to formulate appropriate strategies for enhancing inclusion of urban poor.  A study focusing on earning and expenditure patterns, saving and credit patterns and other related issues will help to understand the needs of urban poor and help to design appropriate financial inclusion schemes for urban poor. Due to budgetary constraints and location of National Institute Bank Management (the sponsor institute) in Pune, a study of the financial inclusion needs of urban poor based on household survey in Pune city. Pune has emerged as the fastest growing urban center and is the second largest city in the state. It is a major industrial center in the state and many leading information technology companies have a strong presence in the city.  It has 14 administrative wards comprising 144 electoral wards. As per 2011 census, Pune's population is 5 million and it is estimated that about 32.84 per cent of the total population constitute slum population.

The objective of this paper is to analyze the nature, characteristics of urban slum dwellers in Pune, a large city of India and determinants of financial inclusion based on a household survey at an identified slum area. The major objective of this study based on a household survey includes the estimation of : (i) broad demographic profile of respondent, head of the family and other family members by age, gender, occupation, income, (ii) the adult bank accounts ratio per household member, (ii) relationship between bank accounts with selected socio-economic variables of the households, (iv) the level of saving, mode of saving, reasons for saving for the respondents, (v) amount of loans availed from various sources, and future likelihood of availing loan, (vi) value of assets, sources of earning, and type of entrepreneurship, (vii) preferred bank timing, intention of banking and intention of undertaking training.

Section 2 provides literature review. Section 3 describes the nature and characteristics of urban slum dwellers in India. The methodology and empirical findings of the survey are discussed in sections 4 and 5 respectively. Section 6 presents statistical analyses and Section 7 concludes with strategyl and policy implications. .

## 2 Literature Review

Lot of focus is being given on financial inclusion of rural poor and concrete policies and programmes are designed for rural poor. Urban poor are neglected at policy level also in many ways even though they constitute a substantial number. As per India Urban Poverty Report- 2009, it is expected that with over 545 million people India will have 41 per cent of its population living in cities and towns by 2030. Urban poverty is nearly 25 per cent. The urban poverty is not declining with GDP growth; urban population and urban poverty are increasing. Thus there is urbanization of poverty. Urban poverty has the problems like housing and shelter, water and sanitation, health and education and social security and livelihoods. Urban poor is another section of the society who need some urgent attention to their needs especially related to livelihood. Timely attention to these needs will help to control many other future problems like urban crime (Indian Urban Poverty Report 2009).

In India, Government of India formed Rangarajan Committee in the year 2008 to deal with financial inclusion. The committee defined financial inclusion as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable group such as weaker section and low income groups at an affordable cost. Rangarajan committee (2008) on financial inclusion has noted that even money lenders often shy to lend to urban poor and urban branches of banks, even though they have manpower and technology support, are not familiar to SHG lending or micro finance. Rangarajan Committee found the difference in terms of rural and urban divide and observed 60 percent of urban adult population in the urban areas and 39 percent in the rural areas have bank account. In terms of loan account, the coverage is 9.5 percent in rural areas and 14 per cent in urban areas.

One major issue of financial inclusions is lack of bank accounts. The World Bank data shows worldwide 2.5 billion do not have bank account with any financial institution. The Global Findex shows majority of the world's poor do not have a bank account and it is not only because of poverty, but also due to costs, travel distance and paper work involved. 59 per cent of adults in developing economies, 77 per cent of adults earning less than $2 a day and 11per cent in high income economies do not have an account at a financial institution. Further 55 per cent of borrowers in developing economies use only informal sources of credit. 47 per cent of the women worldwide do not have an account with formal financial institution and 35 per cent urban residents do not have an account with formal institutions from low –income economies. The highest gender gap is found in South Asia and only 25 per cent women have a formal account as against 41 per cent men (World Bank, 2012). According to World Bank Findex, the number of adults having a financial institution and mobile money account has increased from 51 percent in the year 2011 to 62 percent in the year 2014. India accounts for 21 percent of world's and 66 percent of south Asia's unbanked population. Another study by the high-powered Nachiket Mor committee on Comprehensive Financial Services for Small Businesses and Low-Income Households, set up by the RBI, concluded that only 40 per cent of the rural and urban population had a functional bank account. An all-India Inclusix (a financial inclusion index prepared Rating agency Crisil, a Standard & Poor's company) score was 40.1 per cent indicating about 40 per cent of the population has access to formal banking services. This index varies widely across—from 62.2 per cent in the southern region to 28.6 per cent in the eastern region (Wharton, 2014). Recent empirical evidence using household data indicates that access to basic financial services such as savings, payments and credit can result in a substantial positive difference in improving poor people's lives (Caskey *et al*., 2006; Dupas and Robinson 2009). Employment creation is considered to be the effective strategy for reducing poverty. Micro, small and medium enterprises MSMEs create most jobs in a country. However for MSMEs, lack of access to finance is often one of the major obstacles to growth (Schiffer and Weder, 2001; Cressy, 2002; IADB, 2004; and Beck *et al*., 2005, 2006, and 2008).

Financial inclusion needs to be viewed as an opportunity by banks to do business. Mckinsey Report (2011) pointed out that there was a large need of financial services and exciting opportunity emerging in urban India for the banking sector. It further says that two-thirds of the country's consumption growth over next 20 years will come from urban centers. It has estimated that 45 million urban households will be in less than Rs. 2 Lakh annual income category out of which 60 percent will be from tire I, II and III cities and remaining will be form 5,000 small towns. Financial inclusion of these households will be relevant and banks will have significant lending opportunity of about $ 51,031 million. It would require housing loans, personal consumption loans and loans for micro enterprises along with services like insurance, deposits and remittances. The report has further pointed out that if the banks keep the cost of acquiring customers low there is lot of potential and it is required that the banks should be innovative in their approaches.

Within urban poor different groups have different needs in terms of financial services. Like vegetable vendors will need daily or weekly loans to purchase vegetable from wholesale markets and they will need daily saving as well. The women who are in domestic service may need loans for consumption purposes or loan for purchasing a mobile and a cycle or two-wheeler besides insurance coverage. It indicates that the customized product designing will be necessary to cater the financial service needs of urban poor. Similarly identifying clients or providing services to individual clients will be difficult and hence the banks will have to find out alternatives to work with client system. Innovations will be required to work with different client groups like auto Rikshaw unions or domestic workers' union this will also help to reduce the cost on the part of service providers. It is necessary that the need based financial products are available for poor people which will motivate them to use the existing formal financial services. In order to design need based products and also to motivate people to use existing formal financial services i.e. banks it is necessary to understand the earning pattern of urban poor and further to study their expenditure and saving pattern. Along with these it is necessary to study what are the financial needs of urban poor in terms of saving, credit, insurance and remittances. As there are regional differences and employment availability for poor varies from one city to other, it is necessary to study the urban poor from different cities which are involved in different occupations; this will help to identify the financial inclusion needs in better ways.

Urban poor can be classified in two categories (i) paid employed who are either salaried (who are involved in petty jobs) or wage earners (construction workers, house helps, sex workers or any other activity which is labour oriented), (ii) self-employed are auto drivers, street vendors and all who provide variety of services like hair dressing, laundry, electrician, plumbing, carpentry, etc. The financial transactions may be on daily or weekly basis. Even though, most of the activities involve with risks, people are not covered under insurance. Some of the activities are seasonal and there are seasonal requirements in terms of the capital. To fulfil these economic needs, it is necessary that people have deposits their savings which will enable them to use these deposits in case of emergencies. Besides savings the urban poor also have credit needs as they are involved in self –employment activities. Hence they need credit facilities as well. The IIMS survey (2007) showed that only 14 per cent earners from urban areas had taken loans for business purposes from all sources. As the data indicates that many especially poor people do not access the formal financial services, it will be interesting to review what poor people do in terms of their saving and credit needs and which resources are used. There are some studies which throw light on what poor people do for such financial needs.

Bhattacharyay (1995) and Bhattacharyay (1991) discussed the behaviour of bank customers and quality of customers service of 100,000 households and institutional customers in India. These results were based on a comprehensive study on “All India Savings and Deposit Trends and Patterns” was conducted in the year 1986 which was sponsored by Indian Banks Association and conducted by National Institute of Bank Management, spanning 90000 households in 250 towns and 500 villages and 10,000 institutions. The objective of the study was to estimate the household and institutional savings, ascertain the demographic and socio economic profile savers and non-savers, assess the factors which affect savings behaviour and evaluate preferences for various types of financial assets. The results of this large survey shows that the major motives of the savings were emergencies (85 per cent), children’s marriage (64 per cent), old age (62 per cent), and children’s education (55 per cent). It was observed that awareness about various deposit schemes, in general, were low, particularly in rural areas as well as among low-income people in urban areas. Major reasons behind savings include varied requirements, quality of service and trust with the bank. In terms of selection of bank branch, majority (67 per cent) of customers were driven by location of the branch. At national level, 42 percent of customers invest in financial assets which accounts for 54 percent of the total savings. Region-wide variations were observed in saving patterns as north-eastern region exhibited lower savings. It was observed that customers invested twice the amount in physical assets than financial assets (NIBM, 1986).

Bertrand et al.  (2006) noted that poor understand the importance of saving and they save using diverse channels. Rutherford (1999) focused women in urban slums of Vijaywada in the state of Andhra Pradesh and found that they saved, on an average, as little as Rs. 5 per day with deposit collectors to ensure savings were not wasted or spent. In return, women earned interest on their saving. Another study by Deepti (2011) covered five cities in India and revealed that three fourth of poor respondents used various formal and informal saving mechanisms and they depended on their personal savings to finance unexpected expenses.
A study by Nandhi (2012) focused on how the rickshaw pullers in Delhi manage their money, which different financial instruments were used and what strategies were adopted for saving, credit and remittances. A sample of 176 Rickshaw pullers was interviewed and it was found that 95 per cent saved a portion of earning. Only 1 per cent, however, reported to use bank account for saving and others keep saving with themselves, or with shopkeepers and neighbours.  Around 17 per cent of respondents were saving with relatives or burying money under soil. The saving kept with shopkeepers, on an average, was Rs. 2503/- in last 30 days and with self was Rs. 2906. The analysis of borrowing behaviour showed that the major channels was informal sources such as private money lenders, interest free loans from friends and reciprocal borrowing and lending were the major channels. Around 59 per cent of the respondents had borrowed a large sum of money. The remittance behaviour showed that 81 per cent remitted money regularly and depended on informal channels. This study is indicative about the credit and saving habits of self-employed urban poor. In the Indian context using logistic regression, the study found that income drives bank account and chi square analysis found relationship between bank account with variables such as income, occupation and asset-holding pattern (Bapat 2010).

## 3. Nature and Characteristics of Urban Slums Dwellers in India

It is necessary to understand the urban slums in terms of its characteristics, types, land ownership, availability of various amenities and facilities, health care facilities, access to roads etc. In this regard, National Sample Survey (NSS) report provides us the perspective in better understanding of urban slums.

The key characteristics of the urban slum, based on National Sample Survey (NSS) Report (2010), are as follows:

(i) For this NSS survey, conducted during July 2008 to June 2009, urban areas notified as slums by respective municipalities, corporations, local bodies or development authorities were treated as "notified slums". A "non-notified slum" was a compact urban area with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions;

(ii) All such slums, notified or non-notified, were considered as ‘slum’ for the purpose of the survey, if at least 20 households lived in such a slum within the selected urban block. In the 4738 urban blocks surveyed out of the allotted random sample of 4764 urban blocks during the 65th round, there existed 365 notified and 365 non-notified slums;

(iii) About 49 thousand slums were estimated to be existence in urban India in 2008-09, and 24 per cent of them were located along *nallahs or* drains and 12 per cent along railway lines.;

(iv) About 57 per cent of slums were built on public land, owned mostly by local bodies, state government, etc.;

(v) In 64 per cent of notified slums, a majority of the dwellings were pucca (brick-made hosues), the corresponding percentage for the non-notified ones being 50 per cent;

(vi) For 95 per cent slums, the major source of drinking water was either tap water or tubewell;

(vii) Only 1 per cent notified and 7 per cent non-notified slums did not have electricity connection;

(viii) About 78 per cent of notified slums and 57 per cent of the non-notified slums had a pucca (non mud) road inside the slum;

(ix) About 73 per cent notified and 58 per cent non-notified slums had a motorable approach road;

(x) About 48 per cent of the slums were usually affected by waterlogging during monsoon – 32 per cent with inside of slum waterlogged as well as approach road to the slum, 7 per cent where the slum was waterlogged but not the approach road, and 9 per cent where only the approach road was waterlogged in the monsoon;

(xi) The sanitary conditions in the slums in terms of latrine facility during 2008-09 showed considerable improvement since 2002. Latrines with septic tanks (or similar facility) were available in 68 per cent notified and 47 per cent non-notified slums (up from 66 per cent and 35 per cent respectively in 2002). At the other extreme, 10 per cent notified and 20 per cent non-notified slums (down from 17 per cent and 51 per cent in 2002) did not have any latrine facility at all;

(xii) About 10 per cent notified and 23 per cent non-notified slums did not have any drainage facility. The corresponding proportions in 2002 had been 15 per cent for notified and 44 per cent for non-notified slums. Underground drainage systems or drainage systems constructed of pucca materials existed in about 39 per cent notified slums (25 per cent in 2002) and 24 per cent non-notified slums (13 per cent in 2002);

(xiii) Underground sewerage existed in about 33 per cent notified slums (30 per cent in 2002) and 19 per cent non-notified slums (15 per cent in 2002);

(xiv) Government agencies were collecting garbage from 75 per cent notified and 55 per cent non-notified slums. Among these slums, garbage was collected at least once in 7 days in 93per cent notified and 92 per cent non-notified slums. About 10 per cent notified and 23 per cent non-notified slums did not have any regular mechanism for garbage disposal;

(xv) Over the last five years[1], facilities had improved in about 50 per cent of notified slums in terms of roads (both within-slum road and approach road) and water supply. The incidence of deterioration of any of the existing facilities in notified slums during the last five years was quite low (about 6per cent or below);

(xvi) In case of most slum facilities – sewerage and medical facilities being exceptions – the facility was reported to have improved during the last five years in more than 20 per cent of non-notified slums. Deterioration of any of the existing facilities in non-notified slums, like notified slums, was rare (about 9 per cent or below);

(xvii) Facilities such as street light, latrine, drainage, sewerage and medical facilities were each reported by more than 10per cent of notified slums to be non-existent both at the time of survey and five years earlier. In case of non-notified slums, facilities like street light, latrine, drainage, sewerage and garbage disposal were each reported by more than 20 per cent of the slums to be non-existent, both during the survey and five years earlier;

(xviii) Where improvement had been brought about during the last 5 years, it was due to the Government's efforts in about 80-90 per cent of slums, both notified as well as non-notified and for all the facilities. Improvement in educational facilities at primary level was attributed to NGOs in 13 per cent of the notified slums where such improvement was reported; and

(xix) NGOs were also found to have played a role in the improvement of latrine and sewerage system in non-notified slums.

[1] the changes reported during the last five years in the slums are as reported by the knowledgeable person (from whom the information is collected) depending on his/her perceptions

## 4. Methodology

The section presents the methodology used for the sample selection and data analysis.

### 4.1 Sampling Methods

The sample of urban poor households had been selected from the Pune city belonging to Maharashtra, the most industrialized state of India. Maharashtra has largest slum population in the country followed by Andhra Pradesh and Uttar Pradesh. Hence selection of a city from Maharashtra state was appropriate. In Maharashtra, Pune has been fastest growing urban center and second largest city in the state. It has come out as major industrial center in the state and now also known as center of information technology. Pune city is governed in a decentralized way and ties 4 zones and 14 administrative wards comprising 144 electoral wards. As per 2011 census, Pune's population is 50,49,968. It is estimated that over 10 lakh people are slum dwellers in the city. Approx. 2.04 lakh families contributing to 32.84 per cent of the total population form slum population. Slum dwellers reside in 477 identified slum pockets spread over the city. The slum census report has shown that the slum dwellers contribute to construction and service industries significantly.

The study was carried out in Ramtekdi Slum in Hadapsar Area of Pune City. The slum was chosen as it is a slum area with more than 4000 slum dwellings. Based on Pune Slum Atlas for Hadapsar Ward, the distribution total households by slum pockets are presented in Table 1. The survey, using a structured questionnaire was deployed, was conducted in the February – August 2013. Training was imparted to field investigators with the help of non-governmental organization which had a presence through educational and health linkage in the slum area.

**Table 1: Distribution of Households in Ramtekdi by Slum Pockets**

| Sr.No. | Slum Pocket | No. of Households |
|---|---|---|
| 1 | Sonar Vasti | 107 |
| 2 | ShikalkarVasti | 150 |
| 3 | MangarinBaiChowkVasti | 256 |
| 4 | ThombareVasti | 98 |
| 5 | ValmikiVasti | 405 |
| 6 | Shah Vasti | 532 |
| 7 | Ramnagar | 659 |
| 8 | Laxminagar | 122 |
| 9 | Anandnagar | 381 |

| | | |
|---|---|---|
| 10 | AnnabhauSathe Nagar | 962 |
| 11 | Shantinagar | 393 |
| 12 | Total Slum Structures | 4065 |

Source: Pune Slum Atlas for Hadapsar Ward

## 4.2 Sample Selection of Households and Data Collection

The study was conducted in Ramtekdi slum pocket, using stratified sampling by contacting 202 respondents. The stratified random sampling was arrived based on the area profile. Based on the area selected, random sampling was done based on the list of occupants collected from the Municipal Corporation. The care was taken to choose respondents from different occupations and to have fair representation of males and females and working age group. It was necessary to understand the needs of persons in different age groups and occupations.

The study used the quota sampling based on various areas/vastis representation for Ram Tekdi. Table 2 exhibits the distribution of total sample by slum pocket areas.

### Table 2: Distribution of Sample Households by Slum Pockets

| **Slum Pocket /Vasti** | **No. of Sample Households Selected** |
|---|---|
| Annabhau SatheVasti | 66 |
| RamnagarVasti | 35 |
| ValmikiVasti | 05 |
| ShikalkarChawl | 10 |
| Sonar Vasti | 03 |
| ThombreVasti | 04 |
| BhaginbhaiChawl | 13 |
| Shah Vasti | 25 |
| Shantinagar | 26 |
| Laxmi Nagar | 15 |
| Total | 202 |

Source: Authors' Calculation

A structured questionnaire with some open ended questions was used for the interview. The questionnaire was divided into following major portions: (i) personal information, (ii) saving and expenses, (iii) assets, (iv) bank dealing, and (vii) training.

The key informants included doctors who are practicing in Ramtakadi slum , the corporator , Pune Municipal Corporation from this area and field workers and supervisors of an NGO which was working in this area on variety of issues ranging from day care, pre-primary education to HIV Aids and microfinance activities like Self-Help Groups (SHGs). This helped us to design the tools and supplemented the data collected from respondents.

A focus group discussion was conducted with the leaders of SHGS in the area to get additional information about saving and expenses and credit behaviour. The representatives from following 13 SHGs were present- Aadhar, Bhimai, Prajwal, Sai, Sakhi, Gulab , Anjali, Anand , Bharrai, Disha, Prasnna, Lakshya, Aadarsh . There were 25 women who attended the focus group discussion. The discussion was held as per their time availability and at the place of their convenience. The discussion was helpful to supplement the data collected through the questionnaires and facilitated better understanding about the issues under exploration.

Many field visits were undertaken for the study. The data collection was benefitted from Deepgraha, an NGO, which provided intense knowledge about Ramtekadi slum pocket by working for more than two decades in the area of health, entrepreneurship, sanitation, education, community development and welfare/ charity activities.

Initial interactions were arranged with the Municipal Ward office and meetings were organized with the ward officers with the objective of obtaining the details of the slum population and other information pertaining to the study. During our meeting, it was revealed that Mashal, an NGO, has released a slum atlas for Pune city. Subsequently, meetings were held with the senior officials from Mashal with an objective to capture the problems, issues and make a study design. Intensive meetings were held with office bearers of Deepgraha and focus group meetings were held with women Self-Help Groups (SHG) members. Self-help group is a financial intermediary consisting of 10-20 members who start with savings until they have enough capital for lending in the group.

## 4.3 Statistical Methodology

The financial inclusion is measured by the adult bank ratio was calculated for each sample household using the formula:

Adult Bank Ratio= (No of adult members holding bank account)/
(No of adult members in a household)

The ratio was classified into three categories: low (with less than 0.25), medium (more than 0.25 and less than 0.75) and high (more than 0.75). The mean adult bank ratio was 0.62, indicating that 62 per cent of households possess bank account and rest 38 per cent do not possess bank account.

A regression model was deployed to derive the relationship between the financial inclusion measured by the adult bank ratio which was chosen as a dependent variable and characteristics of the households as independent variables such as age, gender, occupation, income classification, expense classification, housing type, family type and savings classification.

## 5. Empirical Findings of the Survey

### 5.1 Sample Profile

This section discusses the profile of respondents by various socio-economic characteristics. The profile of respondents by age is presented in Table 3.

**Table 3: Distribution of Respondents by Age**

| Age in years | Frequency | In Percentage |
|---|---|---|
| 20 to 35 | 115 | 56.9 |
| 36 to 59 | 83 | 41.1 |
| Above 60 | 4 | 2.0 |
| Total | 202 | 100.0 |

Source: Authors' Calculation

Majority of respondents (56.9 per cent),) belonged to young group in the range 20-35 years followed by middle age group (41.1 per cent) in the range 36 to 59 years.

**Table 4: Distribution of Respondents by Gender**

| Gender | Frequency | In Percentage |
|---|---|---|
| Male | 97 | 48.0 |
| Female | 105 | 52.0 |
| Total | 202 | 100.0 |

Source: Authors' Calculation

As a result of a presence of female field investigators, higher proportion of female respondents (52 per cent) participated in the survey compared to their male counterparts. An analysis of Table 5 shows that self-employed constituted (44 per cent) major portion of households followed by casual labours (23.8 per cent) and salaried employee (20.3 per cent).

**Table 5 : Distribution of Respondents by Occupation**

| Occupation | Frequency | In Percentage |
|---|---|---|
| Self Employed | 88 | 43.6 |
| Daily wage Earners | 6 | 3.0 |
| Salaried Employee | 41 | 20.3 |
| Casual Labor | 48 | 23.8 |
| Others | 19 | 9.4 |
| Total | 202 | 100.0 |

Source: Authors' Calculation

It is important to examine the profile of the head of the family who takes day-to-day decision in running the family. As expected, three-fourth (75 per cent) of the heads of the family is male. However, both the genders were equally represented as respondents (Table 6).

**Table 6: Distribution of Heads of the Household by Gender**

| Gender | Frequency | In Percentage |
|---|---|---|
| Male | 152 | 75.2 |
| Female | 50 | 24.8 |
| Total | 202 | 100.0 |

Source: Authors' Calculation

**Table 7: Distribution of Head of Household by Occupation**

| Occupation | Frequency | In Percentage |
|---|---|---|
| Self Employed | 67 | 33.2 |
| Daily Wage Earners | 3 | 1.5 |
| Salaried Employee | 57 | 28.2 |
| Casual Labor | 54 | 26.7 |
| Others | 21 | 10.4 |
| Total | 202 | 100.0 |

Source: Authors' Calculation

Following the similar trend of respondents (Table 5), Table 6 shows that the "self employed" accounted for 33.2 per cent of head of households followed by salaried employee (28.2 per cent) and casual labor (26.7 per cent).

**Table 8: Distribution of Households by the Type of Family**

| Family Type | Frequency | Percent |
|---|---|---|
| Nuclear | 66 | 32.7 |
| Joint | 136 | 67.3 |
| Total | 202 | 100.0 |

Source: Authors' calculation

As expected, two-third (67 per cent) of the respondents belonged to joint family" (Table 8).

## 5.2 Trends in Financial Inclusions

The major objective of the study was to assess the level of financial inclusion and its relation to major socio-economic variables such as savings, investments, expenses, and other financial and demographic variables.

One of the key indicators of financial inclusion is the proportion of households holding bank accounts measured by the ratio of number of bank accounts to the no of adult family members in a household.

**Table 9: Trends in Bank Inclusion**

| Ratio | Frequency | In Percentage |
|---|---|---|
| Less than 0.24 | 22 | 10.9 |
| 0.25 to 0.74 | 110 | 54.5 |
| More than 0.75 | 70 | 34.7 |
| Total | 202 | 100.0 |

Source: Authors' calculation,

Note: Bank inclusion is the ratio of bank accounts to adult members in a household.

An analysis of Table 9 shows that 54.5 per cent of the households had an inclusion ratio from 0.25 to 0.74, whereas 34.7 per cent have a ratio more than 0.75. The mean was 0.62 which means that 62 per cent of adults have bank account and 38 per cent do not have bank account.

The Indian government has recently implemented an Aadhar card (a biometric identity card) for routing of subsidy through a bank account for a household. Aadhar is a 12 digit individual identifier number issued by the Unique Identification Authority of India on behalf of the government. It serves as proof of identity and address anywhere in India and Government subsidy is routed when bank account is mapped through Aadhar number and other relevant details. The effective implementation of this policy can provide fillip in increasing the bank account holders among poor slum dwellers. During our informal interaction with respondents, we observed that awareness was generated to open bank accounts in order to avail Liquid Petroleum (LPG) gas cylinder subsidy. The survey results showed that 7.4 per cent of respondents had no bank account. In 29 per cent of respondents, all the adult family members have a bank account.

### 5.3 Economic Characteristics of Respondents

The economic characteristics of respondents in terms of income, expenses and savings are discussed in this section.

**Table 10: Distribution of Households by monthly Income**

| Income Classification (in Rupees) | Frequency | In Percentage |
|---|---|---|
| Less than or Equal to 5000 | 22 | 10.9 |
| More Than 5000 and Less Than 10000 | 79 | 39.1 |
| More than 10000 and Less than or equal to 15000 | 48 | 23.8 |
| More Than 15000 | 53 | 26.2 |
| Total | 202 | 100.0 |

Source: Authors' calculation

Around 39.1 per cent of households earned between Rs 5,000 and Rs 10,000 in a year whereas 26.2 per cent earned more than Rs 15,000 and 23.8 per cent earned between Rs 10,000 and Rs 15,000 (Table 10).

Household asset is an important indicator for the wealth. Total assets of all 202 respondents had been estimated to be Rs. 46 million. Based on population of more than 4000, households owned assets of Rs 920 million.

Around 44.6 per cent households spent between Rs 5000 and Rs 10000 in a year whereas 25.2 per cent spent less than Rs 5000 and 18.8 per cent spent between Rs 10,000 and Rs 15,000. This indicates some savings potential for a significant portion of households.

**Table 11: Distribution of Households by monthly expenses**

| Expenses (per year) | Frequency | In Percentage |
|---|---|---|
| Less than or Equal to 5000 | 51 | 25.2 |
| More Than 5000 and Less Than 10000 | 90 | 44.6 |
| More than 10000 and Less than or equal to 15000 | 38 | 18.8 |
| More Than 15000 | 22 | 10.9 |

Source: Authors' calculation

A majority (57.9 per cent) of households had low (less than Rs 500) savings potential. On the other hand, 28.2 per cent of households could save more than Rs 1000 per year (Table 12). As the savings potential of urban poor is small, households should be allowed to open account without any restrictions of a minimum balance.

**Table 12: Distribution of Households by monthly Savings**

| Savings (per year) | Frequency | In Percentage |
|---|---|---|
| Less than or equal to Rs. 500 | 117 | 57.9 |
| More than 500 and less than or equal to Rs. 1000 | 28 | 13.9 |
| More than 1000 | 57 | 28.2 |
| Total | 202 | 100.0 |

Source: Authors' calculation

## 5.4 Banking Habits of Households

### Use of Financial Institutions

There are several financial institutions where households can deposit their savings in the urban area. According to the survey findings, 84 per cent of households saved in banks, followed by informal financial arrangement- Bishi (18 per cent), self help groups (15 per cent), post office (4 per cent), home (4 per cent) and other forms of savings (4 per cent) (Table 13). We can conclude that bank is the preferred institutions for savings. Regarding the reasons for savings, emergency (83 per cent) is the most important reason followed by education (61per cent), employment (21 per cent), and old age (7 per cent). While comparing study from rural bank savers, it was observed that the major motives of the savings were emergencies (85 per cent), children's marriage (64 per cent), old age (62 per cent), and children's education (55 per cent). Comparing both these findings we find that emergency continues to be major reason.

**Table 13: Preference for Saving**

| Saving Type | Percentage |
|---|---|
| Bank | 84 |
| Informal arrangement- Bishi | 18 |
| Self-Help Group | 15 |
| Post-Office | 4 |
| Home | 4 |
| Other saving | 4 |

## Lending Behaviour

In terms of lending practices, around 44 per cent of respondent availed the loan from various sources. In terms of future loan requirements, about 89 per cent of the respondents had shown interest in future loan and 81 per cent of respondents have shown interest to avail loan from the bank followed by SHGs (4 percent). This clearly shows that bank is the most popular institution for financial transactions. There is a gap of 45 per cent in terms of interest in availing loan compared to actual loan availed (Table 14).

**Table 14: Preference for Financial Institutions for Availing Loan**

| Preference for Loan | In per cent |
|---|---|
| Bank | 81 |
| SHG | 4 |
| Friend | 2 |
| Money lender | 1 |
| Gold Loan | 1 |

Source: Authors' calculation

**Table 15: Major reasons for availing loan**

| Major reasons | In per cent |
|---|---|
| Consumption | 45 |
| Business | 41 |
| Social | 1 |

According to Table 15, the major reasons for availing loan were for consumption and for meeting day to day requirements (45 per cent) and business purposes (41per cent).

## Choice of Banking Hours

### Table 16: Preferred Timings for Banking Hours

| Timings | Preference (In percentage) |
|---|---|
| Morning 9 am to 12 noon | 25.9 |
| Afternoon 12 noon to 4 pm | 32.5 |
| 4 pm to 7 pm | 40 |
| 7 pm to 9 pm | 30 |
| After 9 pm | 1 |

Source: Authors' calculation

Frequent uses of banks by households depend on bank operating hours. Table 16 shows that majority of households (70 per cent) prefer a banking hours between 4 pm and 9 pm. Most households prefer to bank after their working hours (Table 16).

## Possession of Documentation for Opening Bank Accounts

One of the requirements for opening bank accounts and availing government subsidy through bank accounts is the possession of a proper identity. There are many documents which can be used for identity proof. Aadhar card which is a biometric card is most authentic for identity proofs. Most (93 per cent) households possessed voter cards and ration cards whereas only 41per cent had Aadhar card (Table 17).

### Table 17: Possession of Identity and Residence Proofs by Households

| Type of Identity Proof | In percentage |
|---|---|
| Voter's Card | 93 |
| Aadhar Card | 41 |
| Insurance | 26 |
| Pancard | 82 |
| Ration Card | 93 |
| Driving License | 40 |
| Electricity Bill | 70 |

| | |
|---|---|
| Mobile Bill | 6 |

Source: Authors' calculation

## 6. Determinants of Financial Inclusion

A multiple regression analysis was performed to find the major determinants of financial inclusion measured by the adult bank ratio. In the regression model, adult bank ratio is the dependent variable and explanatory variables include age, gender, occupation, income classification, expense classification, housing type, family type, family members and present savings.

While performing correlation analysis, we find that adult bank ratio exhibit significant positive correlation with present savings and negative correlation with family head's age, family type and no of family members.

The regression model can be represented as:

$Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$

Where Y is the adult bank ratio, X1 is family type, is the adult bank ratio $X_2$ is present savings classification, $X_3$ is age classification and $X_4$ is number of family members.

### Regression Analysis

In multivariate regression model, it is essential that the data meets the assumptions of the model. For this purpose, we tested linearity of the relationship, multicollinearity heteroscadasticity and normality of errors.

While examining scatter plots, we find the linear relationship between dependent variable and independent variable. Since the values of skewness (-0.241) and kurtosis (-0.635) are within the acceptable range, normality is established.

In the above Table 19, the value of VIF is approaching 1. With the above values of VIF, it indicates that values are not correlated. Hence, multicollinearity does not exist.

The higher value of F at significance level of 0.000 suggests a good fit for the model (Table 18).

**Table 18: ANOVA: Regression Analysis**

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 4.655 | 4 | 1.164 | 12.972 | .000[e] |
| Residual | 17.675 | 197 | .090 | | |
| Total | 22.331 | 201 | | | |

Durbin- Watson value of 2.074 is closer to 2, so it signifies that there is no autocorrelation in the model.

Table 18 presents the regression coefficients of the independent or explanatory variables.

As expected, savings classification is positively related to financial inclusion at 99% significance level. On the other hand, age, family type and family members are negatively related at 99% significance level (Table 19).

**Table 19: Coefficients of Explanatory Variables**

| Variables | Coeff. | Stan dard. Error | Beta Coeff. | t-statistics | Level of Significance | Collinearity Statistics Tolerance | VIF |
|---|---|---|---|---|---|---|---|
| (Constant) | 1.138 | .138 | | 8.256 | .000 | | |
| Family Type | -.182 | .046 | -.257 | -3.994 | .000 | .973 | 1.028 |
| Present Savings_ Classification | .119 | .027 | .277 | 4.325 | .000 | .980 | 1.021 |
| Age Classification | -.120 | .040 | -.193 | -3.025 | .003 | .982 | 1.018 |
| Family Members | -.039 | .014 | -.185 | -2.890 | .004 | .976 | 1.025 |

Note:. Dependent Variable is adult bank ratio

While further deploying chi-square analysis between independent variables and dependent variable, we find that family which is nuclear , the family members are in the range of 2 to 4, the age group of respondents is between 20-35 years and whose saving classification is moderate and high have higher adult bank ratio.

Our study marks the departure from the earlier studies. Since the earlier studies on financial inclusion had a rural focus, our study is unique since it is from the perspective of urban financial inclusion. The study setting is in urban slum in a city of western India. Our study captures the measure of financial inclusion and finds that the financial inclusion ratio for urban households in slum area was 84 per cent and financial inclusion ratio for adult ratio was 62 per cent. The focus of financial inclusion need to be adults as our study observes that 38 per cent of adults remain away from linkage to formal financial organization. The major reasons for saving are emergency followed by education. We find that gap between the households having interest in availing loan (89 per cent) and households availing loan (44 per cent) was high at a level of 45 per cent. Since the benefit of financial inclusion can cover both savings and credit, there is greater need for credit linkage. Based on the preference for bank timings, the majority (70 per cent) of households prefer banking hours between 4 and 9 pm. The time is preferred since it does not affect work schedule.

While performing a multiple regression analysis, we included adult bank ratio as the dependent variable and independent variables as age, gender, occupation, income classification, expense classification, housing type, family type, family members and present savings classification. The regression results indicate that family which is nuclear, the family members who are in the range of 2 to 4, the age group of respondents is between 20-35 years and whose saving classification is moderate and high exhibit higher adult bank ratio. Therefore, the above characteristics of the household are the major determinants of the financial inclusion.

It has been reported in the World Bank study that 2.5 billion do not have bank account with any financial institutions. The reasons for not having bank accounts are found to be poverty, costs, travel distance and paper work. It has been estimated that 77 per cent of adults earn less than $2 a day. It is necessary that financial inclusion, whether rural and urban, needs to be linked to long term profitability of the financial sector as there is fortune at the bottom of pyramid.

We argue that this pyramid exists not only in rural areas but in urban areas as well. When financial inclusion is referred, majority of studies and approach relate to rural financial inclusion. The study was conducted in Pune city in Maharashtra state. The reason for selection of Pune city is that it is one the growing city and the study offered scope for close understanding of urban slums in Pune city. The study was relevant as fewer studies have been conducted in urban areas. It is relevant to understand the status of urban slums. In India, National Sample Survey (NSS) has brought the report. Based on NSS 65 th. Round study, it is reported that there are 365 notified and non notified slums based on study for more than 4000 urban blocks.

The major objective of the study was to capture the broad demographic profile of respondent, Head of the family and other family members; find out the adult bank ratio for the family; find the relation between bank accounts and other variables; assess the saving, mode of saving, reasons for saving for the respondents; find out the loans availed from various sources, and future likelihood of availing loan, preference of banking time; and assess the assets, sources of earning, and identify the type of entrepreneurship.

The present study was conducted with 202 respondents using a mix of area sampling and random sampling in Ramtekdi locality of Hadapsar area in Pune City. Before the survey, meeting with key informants and focus group study was also held. Majority of respondents were in the age group of 20-35 years (57 per cent), self employed (43.6 per cent), and residing in joint families. We classified the financial inclusion ratio into three categories: Less than 0.24, 0.25 to 0.74, and more than 0.75.

Based on population of more than 4000 households, we estimate that Rs. 920 million worth is owned by the residents. Out of household who have shown interest in taking loans in future, majority are keen to avail loan from bank (92 per cent), followed by SHGs. The major reasons of availing loan are for consumption purposes (45 per cent) and business loans (41 per cent). There is clear gap of about 49 per cent of respondents who have shown interest in availing the loan and those who have availed the loan.

## 7. Policy and Strategy Implications

Based on the above findings and informal information collected during interviews, we suggest the following policy recommendations.

### (i) Build a low cost personalized distribution network

There is a need to develop a low cost personalized distribution network for enhancing financial inclusion among urban slum dwellers. This can be achieved if financial service providers enter into partnerships with local market participants and local populace for sharing and leveraging their distribution network and infrastructure. Reserve Bank of India has allowed the use of Business Correspondents. During our study, we find the limited use of Business Correspondents. Accessibility in the form of personalized distribution network is the driver for success. Since business correspondents can meet the unique requirements of timing of service and lower transaction value, business correspondents may find that they can scale the operations.

### (ii) Build asset linked and collateral free entrepreneurship and consumption led credit products

Based on our estimate, we find that there is asset base of Rs. 920 million from estimated 4000 households in Ramtekdi which is arrived after looking into the figure of sample households. The asset amount is Rs. 0.23 million per household. There is a market potential based on asset linked credit products and additional potential based on collateral free credit products. Financial inclusion need to move further from just opening a bank account and need to include loans, advisory services, remittance services and other payment services.

### (iii) Use Aadhar platform for rapid growth and lower cost

Formal financial institutions need to partner with Unique Identification Authority of India (UIDAI) bring not only the scale of financial inclusion initiatives but also significantly reduce upfront customer acquisition costs. During the study, we find that 41 per cent of respondents have Aadhar cards. The transfer of LPG subsidy and other social benefit schemes is driving the linking of Aadhar card with bank account. There is a need to increase the Aadhar card ownership by poor to reach above 90 per cent similar to ownership of voters cards. .

### (iv) Create targeted product and service offering

Offering the right bouquet of products to the customer is crucial to create a pull effect. Service providers need to include mix and match and combination product categories depending on broad profile of customers. These categories are savings, credit, remittance, and other products like insurance, remittance, investment and bill payments. While analysing the future loan requirements, we find that 89 percent respondents have showed interest for future loan. Savings and payment products with inherent payment facility will result in more linkages with the formal institutions. Depending on the profile of customers and based on their repayment history, credit facility can be extended to 41 percent of slum dwellers who have shown interest in loans for business purposes.

### (v) Access Timing

Reserve Bank of India has allowed the Business Correspondent model to act as intermediaries and to provide last mile service to the customers. According to the survey findings, 70 per cent of customers require banking services from 4 pm to 9 pm. Evening or extended banking hours and door step banking are the needs of the hour which needs to be leveraged. Furthermore, based on the focus group discussions, there is propensity for customers to save and avail other banking services in case door step service is leveraged.

### (vi) Conduct aggressive customer contact centers

There is a need to develop customer support in providing financial advisory services. Contrary to the belief that wealth management programme are suited for high income people, we suggest that banks need to change their orientation from transaction to relationship based approach. We find that 60 percent of respondents have evinced interest in trainings. Banks have set up institutions majorly in rural areas for employment generation activities. There is a need to create contact centers where training can be offered which can lead to win-win situation for banks and customers. Banks, on can offer financial health check-up camps with the availability of personnel from formal banking institutions who have a high trust among the residents. The need for wealth management services for these type of customers is pertinent. Customers who are following the financial health discipline need to be rewarded. Customers need to be made aware about various financial instruments. Pinpointed and tailored program need to be focused on various customer segments. The collaborations with various non-government organizations (NGO) working in various areas such as education and health needs to be explored. The bank need to hold entrepreneurship led program so that financial inclusion helps in improving standard of living.

### (vii) Separate Cell on Urban Financial Inclusion

There is generation perception that financial inclusion is related more with rural financial inclusion. We argue that there are unique problems associated with Urban Financial Inclusion and hence, unique approach is required to deal with urban financial inclusion.

Banks need to establish a separate cell for financial inclusion and need to monitor the progress through transaction history, extensive usage of customer analytics for business development and Non Performing Assist (NPA) management. Bank need to prepare Financial Inclusion Index which needs to be based upon usage of bank account, and overall product linkage such as payments, savings, loans and advisory. Our study found the adult bank ratio. To start with, bank needs to track the adult bank ratio and ensure that all the adult members hold a bank account. The bank need to hold a sensitization program that opening of bank accounts is the start of financial inclusion. It is one of the measure but not the only measure of financial inclusion. The monitoring can be extended to adult credit ratio, adult remittance ratio, adult insurance ratio. The data on family medical expenses can help the insurance companies to devise suitable product that mitigate the risk arising from medical exigencies. Ultra small branches can be deployed effectively for urban financial inclusion.

Furthermore, the following strategies can enhance urban financial inclusion:

i) As the savings potential of urban poor is small, households should be allowed to open account without any restrictions of a minimum balance.
ii) According to the survey findings, customers also require banking services at a time (70 per cent want banking services from 4m to 9 pm), banking hours in banks near slums should be extended to evening hours.
iii) Provide asset-linked lending activities without collateral
iv) Provide education on banking doe enhancing banking habits (high correlation and regression coefficient of education level with banking inclusion will confirm this strategy)

v) Formulae appropriate deposit schemes based on the reasons for savings (reasons for savings, emergency (83 per cent) is the most important reason followed by education (61per cent), employment (21per cent), and old age (7per cent).

vi) Formulae appropriate credit schemes based on the reasons borrowing (the major reasons for availing loan were for business purposes (41per cent) followed by "other purposes" including consumption loans (45 per cent).

## References


1. National Institute of Public Finance and Policy ( ), A slum free cities – New Deal for Urban Poor, , New Delhi.
2. Bhattacharyay Biswa. Nath (1995), "Banking Behavior of Institutional Customers in India", Savings & Development, Quarterly Review, Vol. XIX, No. 1, Cariplo, Milan, Italy.
3. Bhattacharyay Biswa. Nath (1991) "Evaluation of Customer Service in Banking Industry", Decision, The Journal of Indian Institute of Management, Calcutta( IIMC), Calcutta, Vol. 18, No. 1, Jan-March.
4. National Institute of Bank Management (NIBM, 1986), All India Savings and Deposit Trends and Patterns.
5. Bapat D (2010)**.** Perceptions on banking service in rural India: an empirical Study. International Journal of Rural Management, 6(2), 303-21.
6. Beck, T., A. Demirgüç-Kunt, and M. S. Martinez Peria (2008). Banking Services for Everyone? Barriers to Bank Access and Use around the World. World Bank Economic Review, 22(3), 397-430.
7. Beck, T., A. Demirgüç-Kunt, and V. Maksimovic (2005). Financial and Legal Constraints to Firm Growth: Does Firm Size Matter?. Journal of Finance, 60, 137–7.
8. Beck, T., A. Demirgüç-Kunt, L. Laeven, and V. Maksimovic (2006). The Determinants of Financing Obstacles. Journal of International Money and Finance, 25(6), 932-952.
9. Bertrand, Mullainathan and Shafir. (2006). Behavioral Economics and Marketing in Aid of Decision Making Among the Poor, AMA.
10. Caskey, J., C. R. Duran, and T. M. Solo (2006). "The Urban Unbanked in Mexico and the United States." Policy Research Working Paper 3835. World Bank, Washington, DC.

11. Chandramouly A (2011). Financial Inclusion has emerging urban opportunity. The Hindu Business Line , 6th Nov.2011
12. Collins Daryl, Morduch Jonathan, Rutherford Stuart and Ruthven Orlanda (2010), "Portfolios of the poor: How the World's poor live on $2 a day", Princeton University Press.
13. Cressy, R. (2002). Introduction: Funding Gaps. Economic Journal. 112 (477), F1-F16.
14. Deepti KC (2011). Rethinking Reserve Bank of India Regulations for MFIs: An Analysis of Microfinance Clients from Urbana and Semi-urban Communities: IFMRCMF.
15. Demirguc- Kunt ,Asli, LeoraKlapper (2012) Measuring Financial Inclusion : The Global Findex Database. World Bank Policy Research Working Paper- 6025.
16. Department of Financial Services, Ministry of Finance, Government of India http://pmjdy.gov.in/account accessed on 22/10/2015.
17. Dupas, P., and J. Robinson (2009). Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya. NBER Working Paper 14693. National Bureau of Economic Research, Cambridge, MA.
18. Financial Inclusion in India: Moving Beyond Bank Accounts, September 18, Wharton, 2014.
19. Gangopadhyay and Bhattacharyay (2015), Economics of Social Inclusion and Protection in ASEAN, India and China, the paper presented at the International Conference on Employment and Social Protection organized by CESIfo— University of Munich and Ifo Institute, 15-16 May.
20. Gangopadhyay and Bhattacharyay (2015), Is there a Nonlinear Relationship between Economic Growth and Inequality? Theory and Lessons from ASEAN, People Republic of China and India, Working Paper Series, No 5377, CESifo Group Munich, University of Munich, June.
21. Haan, Arjan (1997), 'Poverty and Social Exclusion: A Comparison of Debates on Deprivation' Working Paper No. 2, Poverty Research Unit, Sussex University Brighton
22. Financial Inclusion in India: Moving beyond bank accounts , Wharton Knowledge series, , September 18, 2014.http://knowledge.wharton.upenn.edu/article/financial-inclusion-india-aims-move-beyond-bank-accounts/--accessed on 26 July 2015
23. Sriram M S and Parhi Smita (2006), "Financial Status of Rural Poor: A Study in Udaipur District , Economic and Political Weekly, Vol. 41, No. 51, pp. 5269-75.

Financial Status of the Poor: A Study in Udaipur District (with Smita Parhi) Economic and Political Weekly, Vol 41. No.51. December 23, 2006.

24. http://www.iimahd.ernet.in/publications/data/2004-02-01sriram.pdf accessed on 06/08/2015
25. The Global Findex Database 2014: Measuring Financial Inclusion around the world, World Bank report 2014, http://www.worldbank.org/en/programs/globalfindex accessed on 06/08/2015
26. IADB (Inter-American Development Bank) (2004). Unlocking Credit: The Quest for Deep and Stable Lending, Baltimore, MD: Johns Hopkins University Press.
27. India Urban Poverty Report (2009) Ministry of housing and urban Poverty Alleviation and UNDP-India
28. Johnson, Doug & Meka, Sushmita. (2010). Access to Finance in Andhra Pradesh: IFMRCMF.
29. Jonathan Morduch (2009) Borrowing to Save: Perspectives from Portfolios of the Poor New York University
30. Kamath Rajalaxmi and Dattasharma Abhi (2013), “MFI (Micro Finance Institutes) Borrowers: Their loans and repayments- A study in Ramanagaram, India, Working Paper No. 397, IIM Bangalore
31. Nandhi M. A. (2012) The Urban Poor and their Money: A Study of Cycle Rickshaw Pullers in Delhi' , Center for Microfinance, IFMR, , April 2012
32. NSS 65 th. Round (2010) Some Characteristics of Urban Slum, National Sample Survey Office, May 2010.
33. Om Prakash Mathur (2009) National Urban Poverty Reduction Strategy 2010-2010AD:
34. Oya Pinar Ardic,Maximilien, Heimann,Nataliya Mylenko (2011) Access to Financial Services and the Financial Inclusion Agenda Around the World-A Cross-Country Analysis with a New Data Set , The World Bank , Financial and Private Sector Development, Consultative Group to Assist the Poor
35. Portfolios of the Poor: How the World's Poor Live on $2 a Day , Princeton University Press, 2009
36. Pune Slum Atlas, Hadapsar, Ward No. 6, Prepared by Mashal.
37. Report of the Committee on Financial Inclusion (2008), Reserve Bank of India.
38. Retail Banking in Asia, Mckinsey and Company, 2011.
39. Rutherford, Stuart. (1999) The Poor and Their Money: An essay about financial services for poor people: Department for International Development, New Delhi
40. Sa-Dhan (2008): The Bharat Microfinance Report – Quick Data 2008, New Delhi.

41. Sen Amartya (2000), “Social Exclusion: Concept, Application and Scrutiny”, Social Development No. 1, Office of Environment and Social Development, Asian Development Bank, June 2000.
42. Schiffer, M., and B. Weder (2001). Firm Size and the Business Environment: Worldwide, Survey Results. Discussion Paper 43, International Finance Corporation, Washington,DC.
43. Second Baseline Survey analysis –Borrowing Patterns-(2010), APMAS
44. Udeshi K.J. (20011) Financial Inclusion For Urban Poor - Inclusion- Skoch
45. World Bank (2014), “Global Financial Development Report” Financial Inclusion 2014.